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Food Waste/Organics Reduction & Recycling:

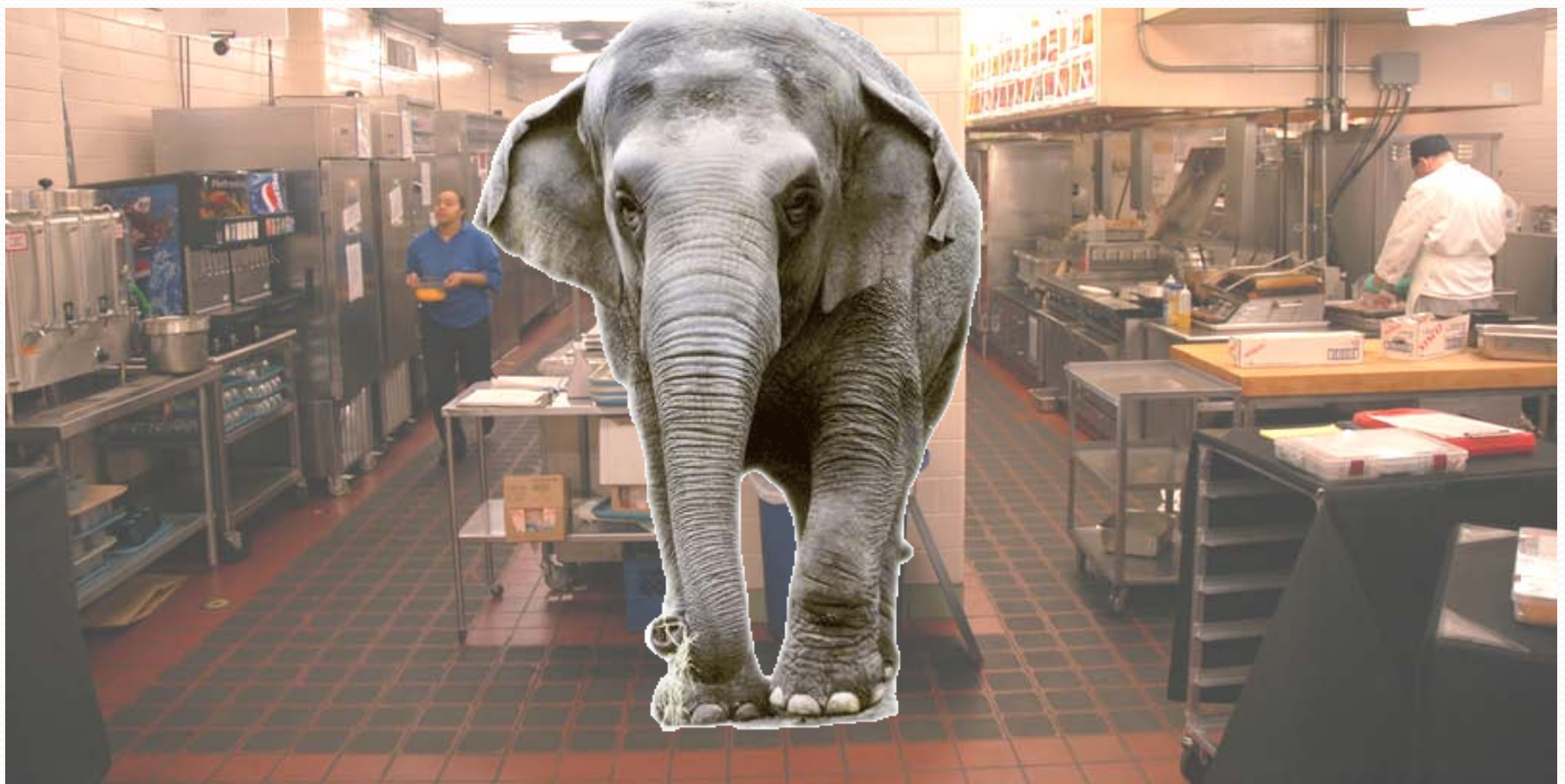
Source Reduction Strategies in Foodservice

US EPA RCC Web Academy | November 18, 2010



www.leanpath.com
Blog.leanpath.com

Speaker:
Andrew Shakman
(503) 620-6512 x[100
ashakman@leanpath.com







Topics

- Why organic waste matters to foodservice operators?
- What can be done to prevent organic waste at the source?

Why focus on waste?

The Case For Waste Management

Reduce
Environmental
Impacts

Reclaim
Financial
Resources

Engage Staff

Environmental Impact



The diagram consists of two large, teal-colored arrows pointing in opposite directions. The left arrow points to the left and contains the word 'Upstream'. The right arrow points to the right and contains the word 'Downstream'. Below each arrow is a line of smaller, lighter-colored text. The top of the slide features a decorative header with wavy lines in shades of teal and grey.

Upstream

Where we get our
food & supplies

Downstream

Where we send our
food & supply waste

Upstream Impact – Food Waste



Every item we throw away includes embedded energy and created a range of environmental impacts

Downstream Impact – Food Waste

- The decomposition of food in landfills produces methane, a green-house gas 20+ times more potent than Carbon Dioxide.
- Landfills are the largest human-related source of methane in the US, accounting for over 20% of all methane emissions.



Why focus on waste?

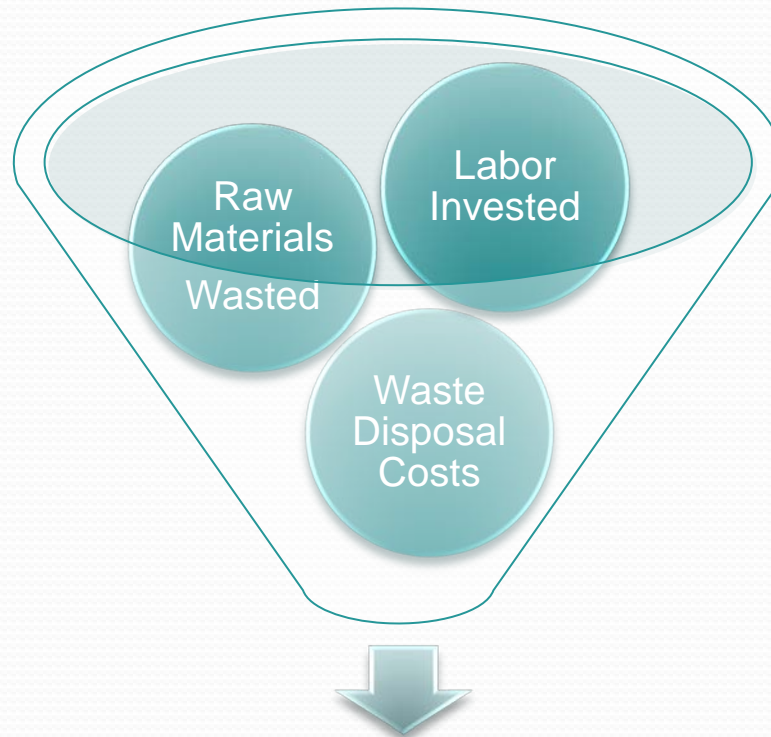
The Case For Waste Management

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The Real Cost of Waste

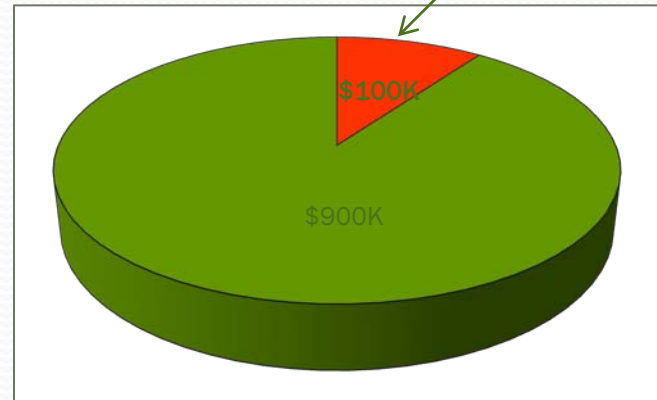


“Real Cost of Waste”

Raw Material Cost Savings – Food

Food waste generated by the operator (“pre-consumer waste”) represents 4-10% of the food purchased in volume foodservice

Up to \$100K in Food Waste!



Example: \$1.0M Food Purchases

Why focus on waste?

The Case For Waste Management

Reduce
Environmental
Impacts

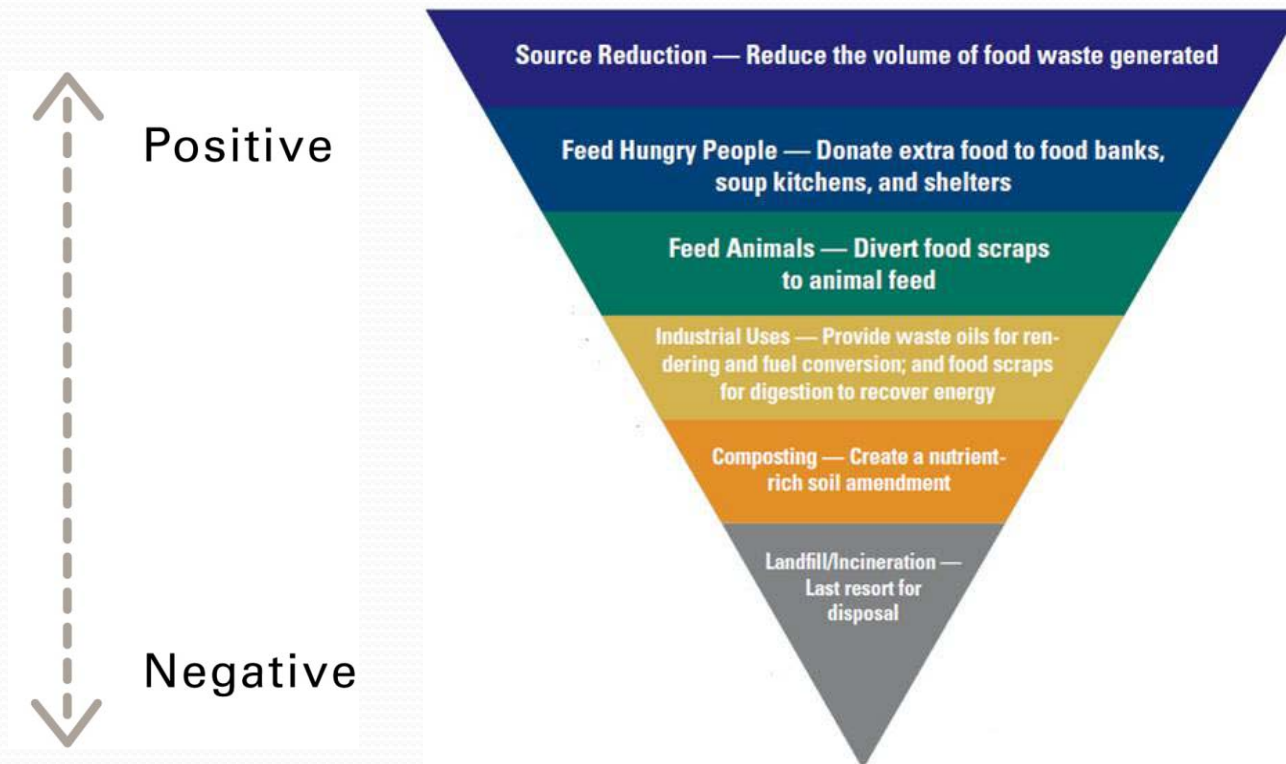
Reclaim
Financial
Resources

Engage Staff



So where do we start?

EPA Food Waste Recovery Hierarchy

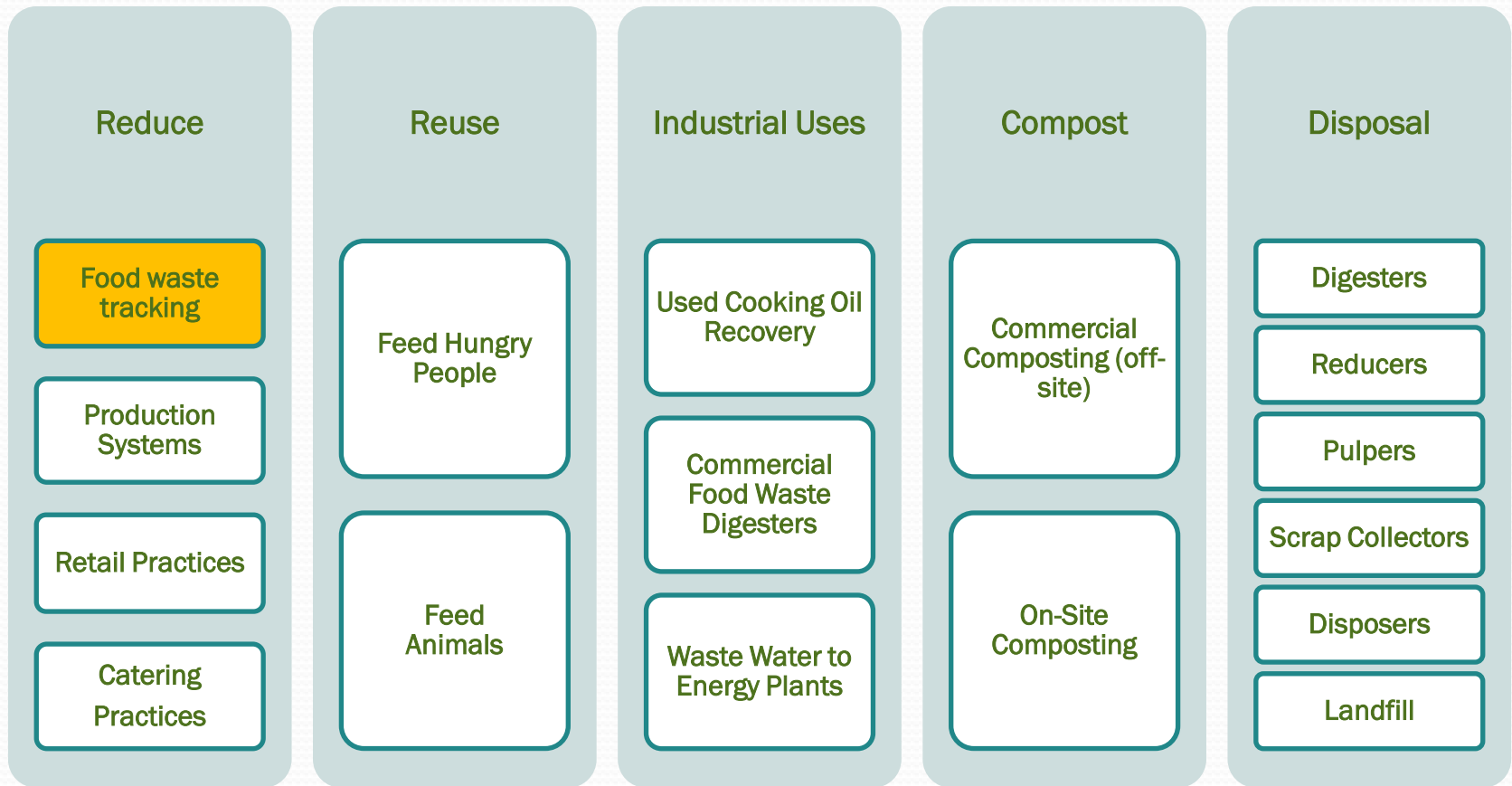




Source Reduction

Often overlooked

- Not as tangible as composting or food recovery
- Operators, consultants and government aren't sure what tools are available to address the problem



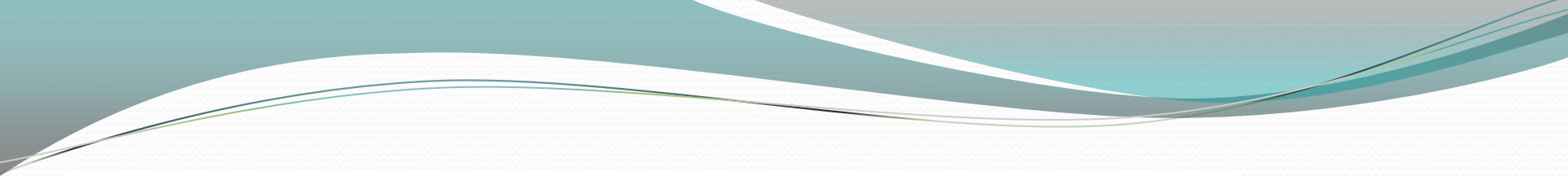
Why Track?

Tracking enables you to:

- Establish baselines
- Diagnose issues
- Raise employee awareness
- Raise guest awareness
- Create accountability
- Monitor & benchmark progress.



**Reduction &
tracking =
Two sides of one
coin.**



*Feedback loops
focus behavior and
drive change*



What type of behavior change?

- Purchase more accurately
- Produce more accurately
- Change production methods
- Focus behavior
- Improve communication



“We manage the things we measure”

If we don't track how much we throw away, how do we really know what and how to improve? If we don't measure, we're guessing.



How to Track Food Waste?

Two Types of Food Waste

Pre-Consumer Food
Waste

(aka “Kitchen Waste”)

Post-Consumer
Food Waste

(aka “Plate Waste”)

Different Tracking Approach for Each

discards the waste

discards the waste

Pre/Post Food Waste Dynamics

	Pre-Consumer	Post-Consumer
Drivers	Overproduction, spoilage, expiration, trim waste, communication, adherence to forecasts/recipes	Guest awareness and behavior, portion sizes, service style (self-serve, trayless, etc.)
Starting point	Separated by food	Commingled
Cost impact	Large, direct	Varies by operation; indirect
Controllable by:	Foodservice team	Foodservice team and Guests

What To Track

- Overproduction
- Spoilage
- Expired/Dated Items
- Trim Waste
 - (i.e. fresh fruit rinds)
- Contamination
- Burned/Dropped Items



Kitchen

Hot
Production

Cold
Production

Other
Areas

Servery

Hot Line

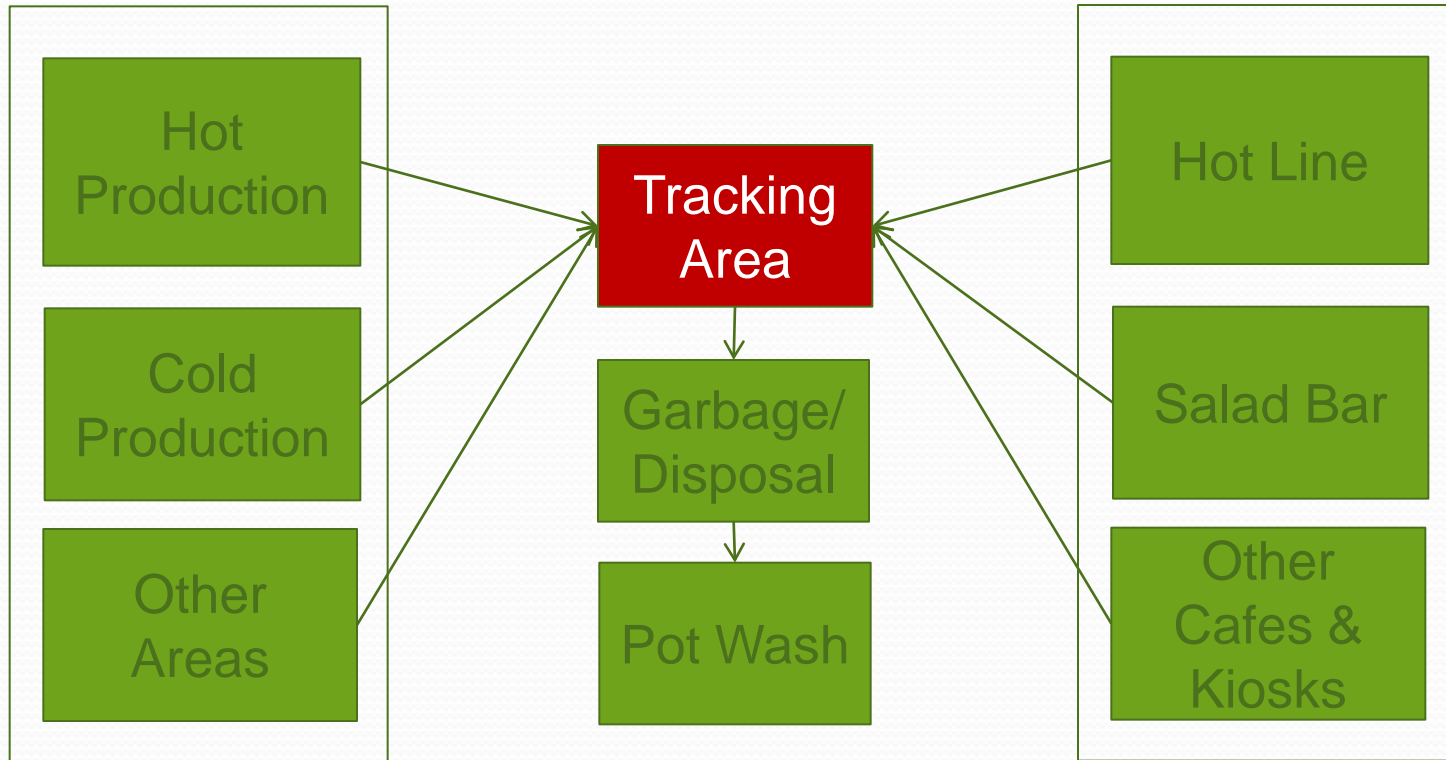
Salad Bar

Other
Cafes &
Kiosks

Tracking
Area

Garbage/
Disposal

Pot Wash



Basic Information to Track

- Date & Time
- Recording Employee Name
- Food Item
 - by general category e.g “Produce”
 - Very specifically e.g. Apples
- Reason for Loss
- Unit of Measure
 - Weight, Volume or Each/Count

Advanced Information to Track

- Container (for Tare Weight)
- Station/Source
- Disposition
- Daypart
- Banquet Event Order #
- Pre v. Post Consumer
- Overs / Not-Yet-Waste (NYW)
- Notes

Tools

- Paper Sheets
 - Suited for lowest volume ops; low detail
- Software + Paper
 - Suited for low-medium ops, good detail.
- Full Automation
 - Suited for higher-volume ops, maximum detail
 - Easiest for staff to use, easiest for managers to run
 - Higher ROI (~4%+ food cost savings)


Basic Paper Log Book

Waste Logbook – XYZ Restaurant

Date: _____ Weather: _____
 Notes/Special Events Today: _____

Time	Recorded By	Food Type	Loss Reason	# of Portions	# of Quarts	# of Pounds
					PICK ONE	
TOTAL						

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 For information on waste tracking technology tools, visit www.leanpath.com



Logbooks + Software

[illegible]

- Grouping by Food or Loss Categories
- Designed for ease of input into reporting software package

Example: Data Entry

The screenshot displays the WasteLOGGER application window. The title bar reads 'WasteLOGGER'. The menu bar includes 'File', 'Tasks', 'Tools', 'Advanced', 'View', and 'Help'. On the left is a 'Tasks' sidebar with expandable sections: 'Gather Data' (containing 'Enter Log Sheet Data', 'Manage Data Entry Tem...', and 'Manage Forms'), 'Post & Review Data' (containing 'Review Reports', 'View Transactions', and 'Print Weekly Reports'), 'Set & Review Goals' (containing 'Print SWAT Form' and 'Enter SWAT Notes'), and 'Recognize Staff' (containing 'Print Staff Mtg Agenda'). At the bottom of the sidebar are buttons for 'Show All Tasks' and 'Hide All Tasks'. The main area is titled 'Enter Log Sheet Data' with a 'Form Set' dropdown set to 'DE Template 1'. It contains a 'Session ID' field with value '68', 'Waste Data From' and 'Session Started' both set to '09/22/10', a 'List' dropdown set to 'Sample', and a 'Data Entered by' field with a '(Click to set)' prompt. There are buttons for 'New Session', 'Open Session', and 'Close Session'. A 'Data Entry Defaults' section shows 'Pre/Post Type' set to 'Pre-consumer'. Below this is the 'Enter Waste Data' section with fields for 'Quantity', 'Timestamp' (09/22/10 7:49 PM), 'Food Type', 'Loss Reason', 'Container Type', and 'Transaction Notes'. 'Clear Entry' and 'Save and New Item' buttons are present. A 'Session Summary' button is at the bottom left. The footer includes 'Shortcuts' (Add User, Remove User, Update Tracker), 'Settings' (Manage Reports, Manage Recurring Transactions), 'Current Database: NewerEvenYetGeneric_VWA4 - Copy.mdb', 'Current User: Administrator', and the 'LeanPath' logo.

WasteLOGGER

File Tasks Tools Advanced View Help

WasteLOGGER

Tasks

- [-] Gather Data
 - ☐ Enter Log Sheet Data
 - ☐ Manage Data Entry Tem...
 - ☐ Manage Forms
- [-] Post & Review Data
 - ☐ Review Reports
 - ☐ View Transactions
 - ☐ Print Weekly Reports
- [-] Set & Review Goals
 - ☐ Print SWAT Form
 - ☐ Enter SWAT Notes
- [-] Recognize Staff
 - ☐ Print Staff Mtg Agenda

Show All Tasks Hide All Tasks

Enter Log Sheet Data Form Set: DE Template 1

Session ID: 68
Waste Data From: 09/22/10
Session Started: 09/22/10
List: Sample
Data Entered by: (Click to set)

New Session
Open Session
Close Session

Data Entry Defaults:
Pre/Post Type: Pre-consumer

Enter Waste Data:

Quantity:	Timestamp: 09/22/10 7:49 PM	Food Type:	Loss Reason:	Container Type:	Transaction Notes:
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Clear Entry Save and New Item

Session Summary

Done

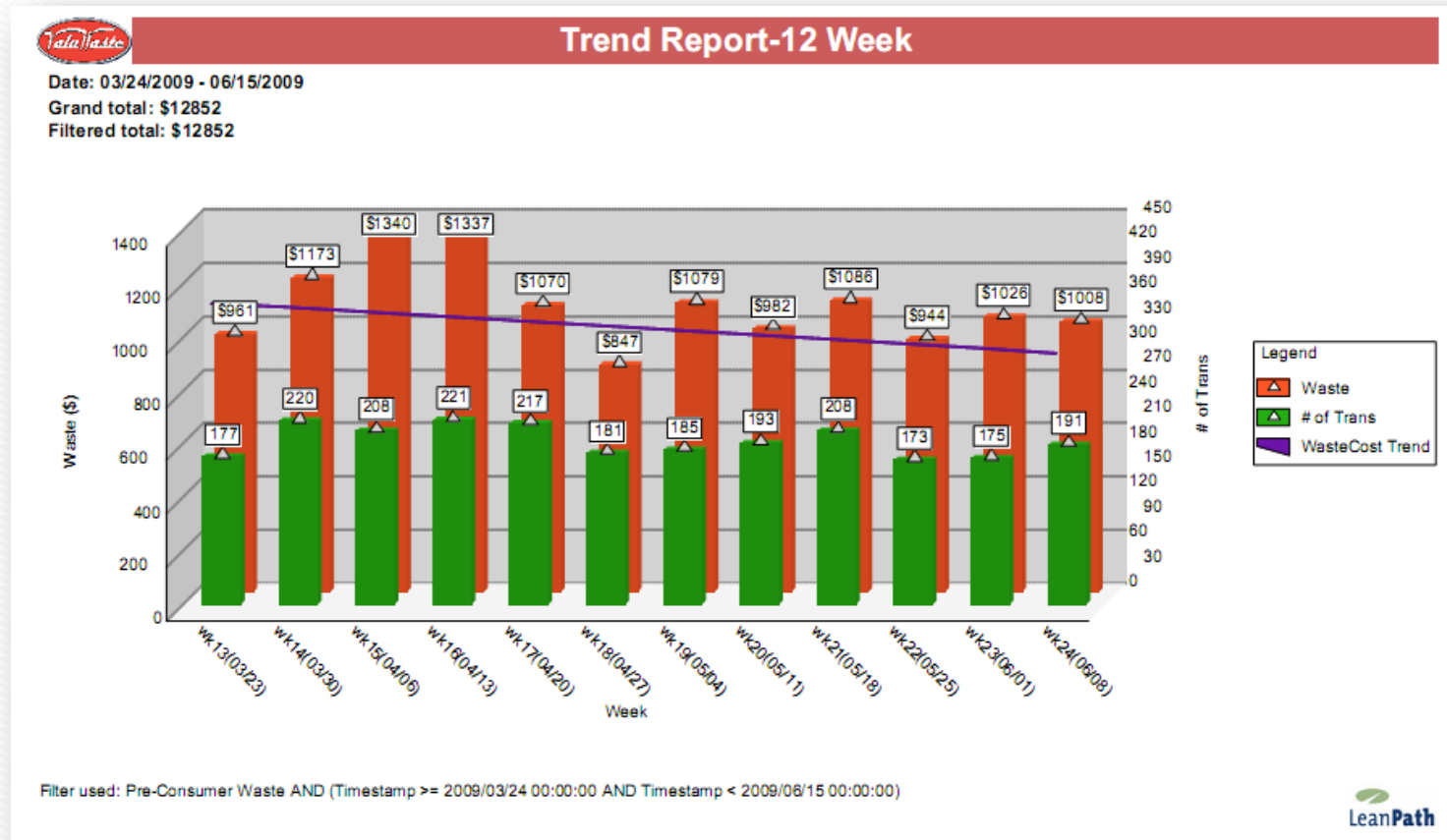
Shortcuts
Add User
Remove User
Update Tracker

Settings
Manage Reports
Manage Recurring Transactions

Current Database: NewerEvenYetGeneric_VWA4 - Copy.mdb
Current User: Administrator

LeanPath

Lookback at Trends



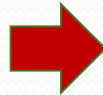
Automated Tracking



Tracking Process

1. Collect Pre-Consumer Food Waste

2. Enter Data



Waste Recording

4.8 lb.	set zero
Vangie C	
Select Food	
Select Reason	
Select Container	
X	

Bakery	Beef - Grnd
Beef - Whl	Casserole
Chix	Chix-w/Bone
Compound Salad	Weekly Soup
Daily Soup	Dairy
Deli Meat	More



Waste Recording

10.0 lb.

set zero

Christopher M
Change User

Jun 19, 2009 12:09:36 PM

Weigh More

Done

Value of Last Recorded Item: \$42.81

A/N Settings

Control Panel

View/Change

Paper Tracking



Most Wasted Foods

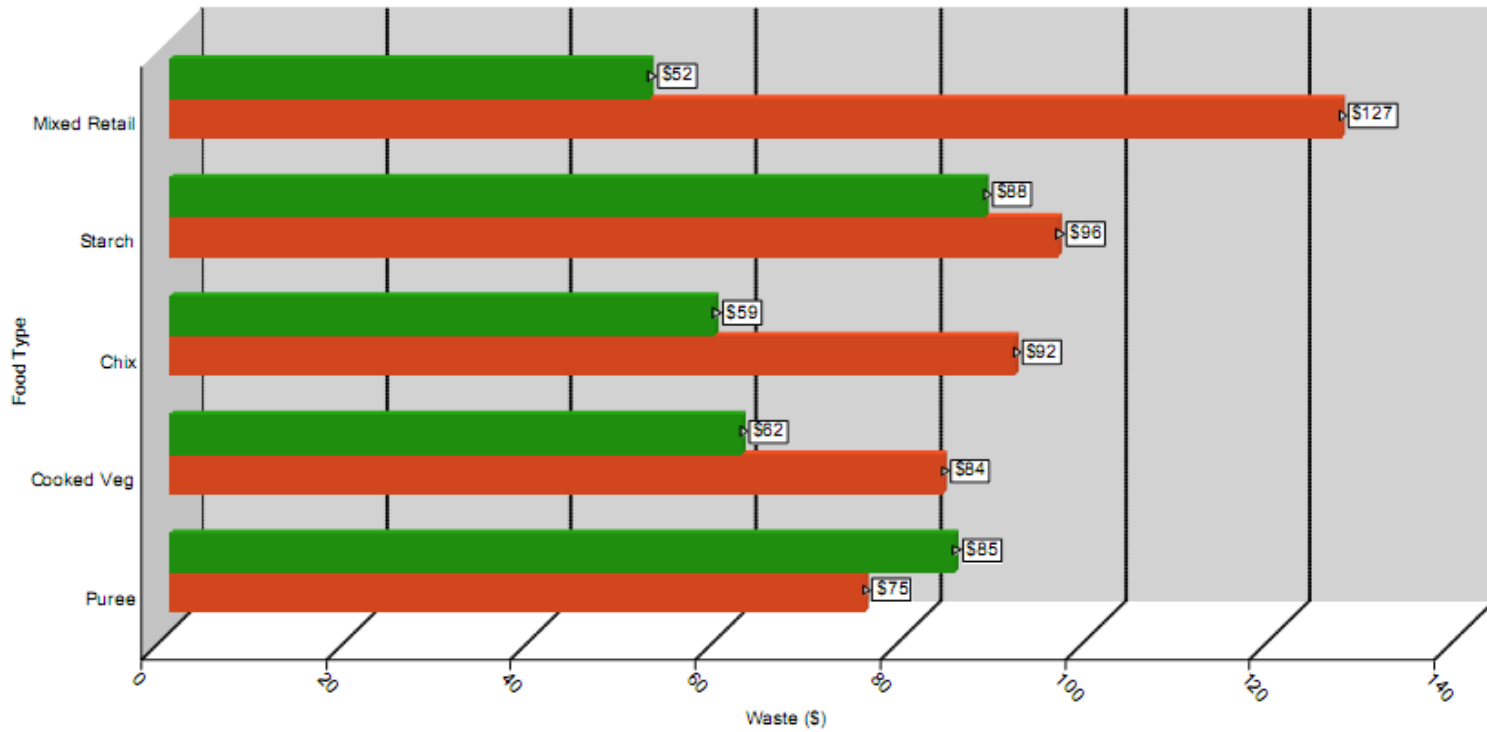


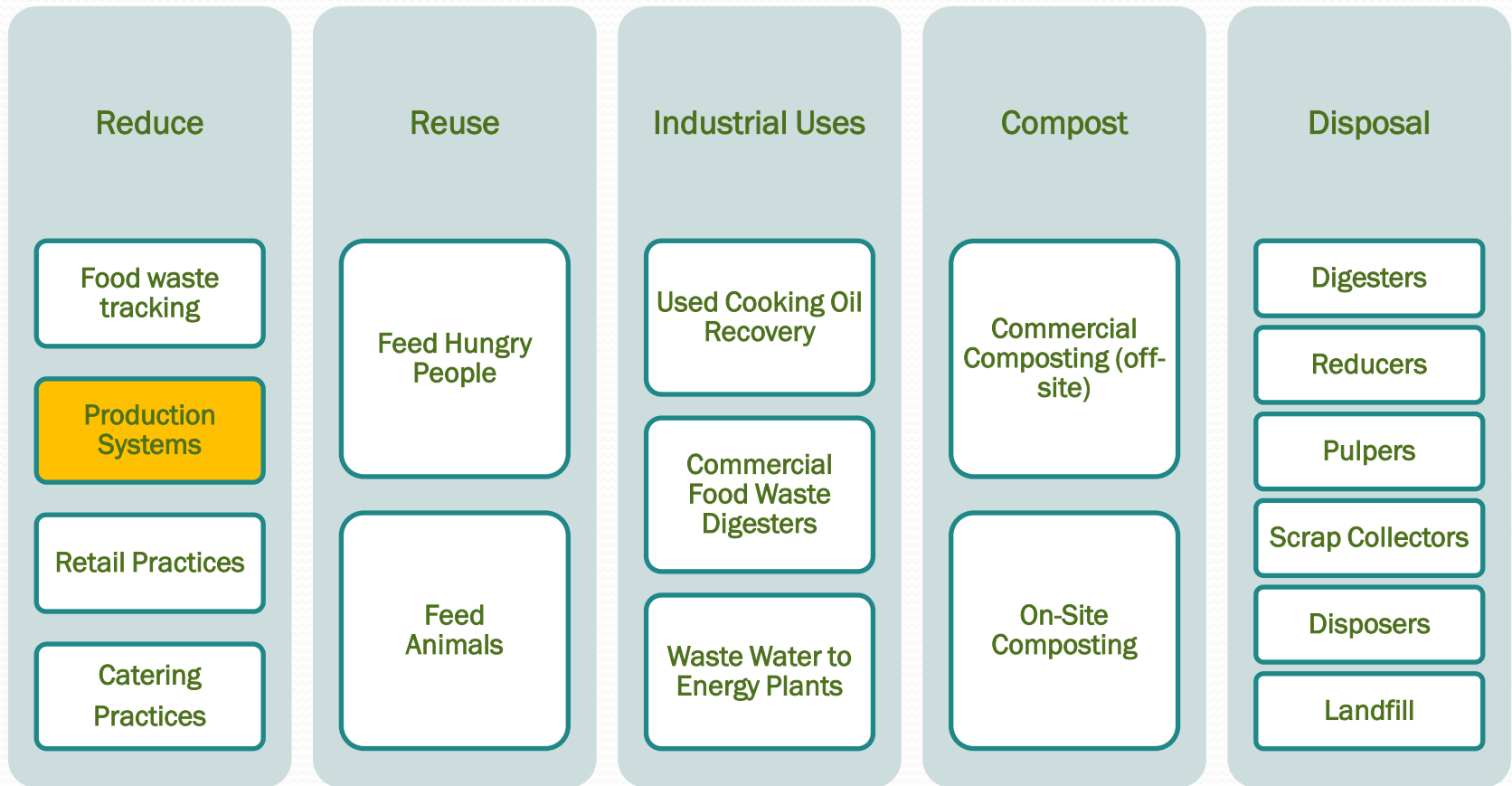
Top 5-Food Categories

Legend

Week 1: 06/07/2009 Total: \$939, Filtered: \$473

Week 2: 05/31/2009 Total: \$1022, Filtered: \$346

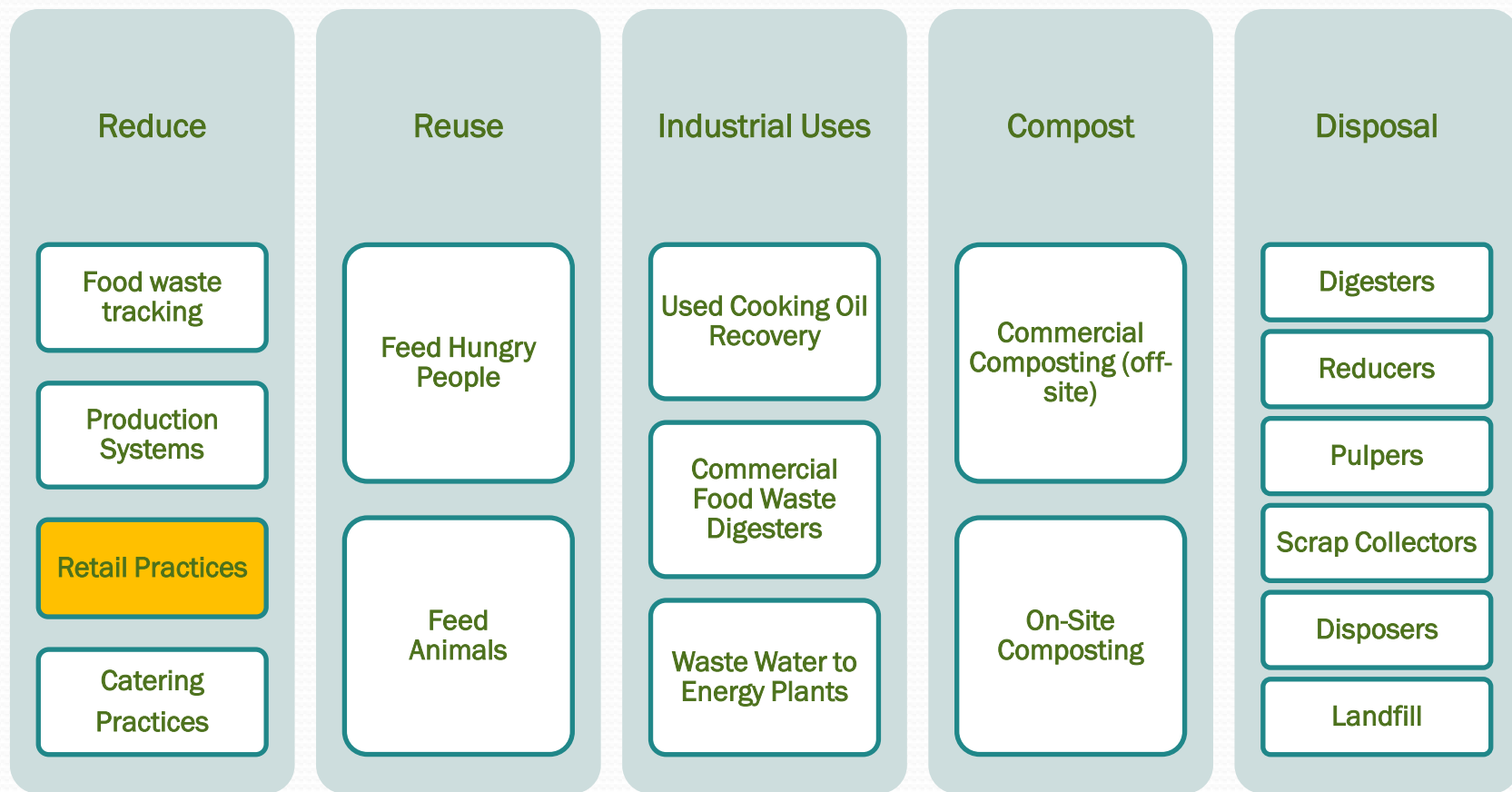




Source Reduction: Production Systems

- Production systems are critical to successful forecasting, purchasing, inventory management, recipes, menus and production.
- They focus on production management data rather than the culture of the operation, so do not replace the need for food waste tracking.





Source Reduction: Retail

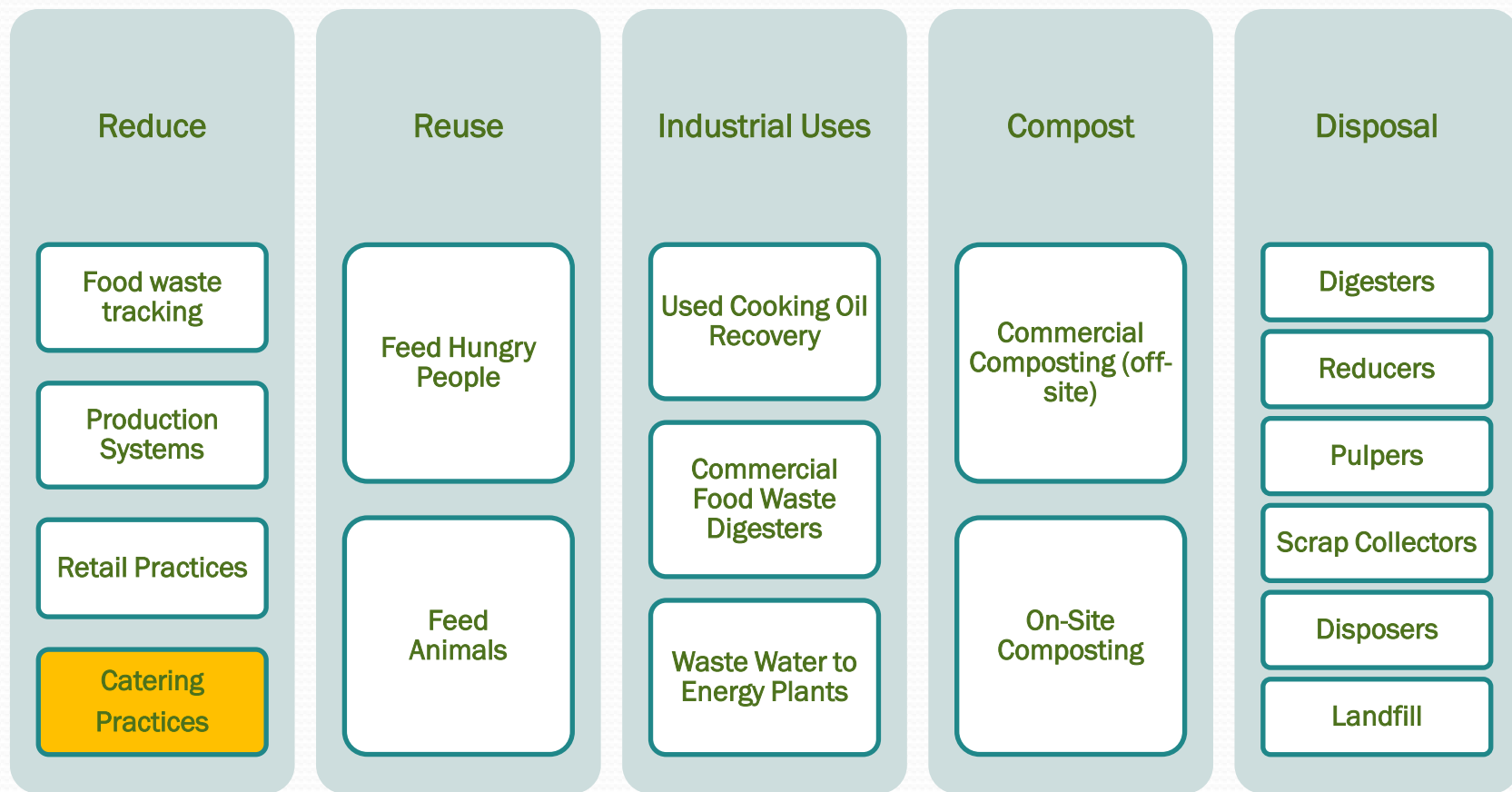
- Common challenges
 - Soup
 - Salad bars
 - Breakfast
 - Desserts
 - Starches
- Planning and execution gaps are a significant problem
- Merchandising



Source Reduction: Retail

- Review grab & go par levels
- Provide variety w/o excess volume





Source Reduction: Catering

- Myths:
 - “It’s been paid for”
 - “We have to produce to guarantee”
 - “It’s in the contract”
- Always room for improvement



Post-Consumer Source Reduction

- Portions
 - Portion design
 - Service methods (equipment, systems)
 - Plate sizes
- Service style
 - Self service
 - Staffed service
- Guest awareness programs
- Popularity: plate waste studies

Q&A

Andrew Shakman
Co-Founder & President,
LeanPath, Inc.



Food Waste Tracking Systems

Contact:

Phone: (503) 620-6512 x100

E-mail: ashakman@leanpath.com

Web: www.leanpath.com

Blog: blog.leanpath.com

Twitter: twitter.com/leanpath